

IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Previously Presented) A method for alternately contacting two wafer-like component composite arrangements, comprising: bringing the two component composite arrangements, each provided with contact metallizations on their opposing contact surfaces, into a coverage position with their contact metallizations to form contact pairs, in which position the contact metallizations that are to be joined together are pressed against one another, the contact metallizations being thereby contacted by exposing the rear of one of the component composite arrangements to laser radiation, whereby the wavelength of the laser radiation is selected as a function of the degree of absorption of the component composite arrangement exposed to laser radiation at the rear, so that transmission of the laser radiation through the component composite arrangement exposed to the laser radiation at the rear is essentially suppressed or absorption of the laser radiation takes place essentially in the contact metallizations of one or both component composite arrangements, wherein the laser treatment is performed by means of a composite arrangement of a plurality of diode lasers which are activated individually or in groups to emit laser radiation such that all the contact pairs or those combined into groups are exposed to laser radiation for the contacting.

2. (Previously Presented) The method according to Claim 1,

wherein

the substrate material of the component composite arrangement that is exposed to laser radiation at the rear is selected so that there is transmission of the laser radiation through the component composite arrangement exposed to the laser radiation at the rear and there is absorption of the laser radiation in the contact metallizations of the component composite arrangement exposed to laser radiation at the rear.

3. (Previously Presented) The method according to Claim 1,

wherein

the substrate material of the component composite arrangement exposed to laser radiation at the rear is selected so that there is transmission of the laser radiation through the component composite arrangement exposed to laser radiation at the rear and there is absorption of the laser radiation in the contact metallizations of the component composite arrangement exposed to laser radiation at the rear and in the contact metallizations belonging to the opposing component composite arrangement, these contact metallizations having a larger surface area in comparison with the contact metallizations of the component composite arrangement exposed to laser radiation at the rear.

4. (Canceled).

5. (Previously Presented) The method according to Claim 1,

wherein

the diode laser composite arrangement is designed as a diode laser linear arrangement which is arranged at a distance below the component composite arrangement which is exposed to laser radiation at the rear, and the diode laser linear arrangement is moved in at least one axis and in parallel to the plane of extent of the component composite arrangement.

6. (Previously Presented) The method according to Claim 1,

wherein

the diode laser composite arrangement is designed as a diode laser matrix arrangement, whereby the diode lasers are activated in their totality or only to the extent of a partial matrix according to the size of the component composite arrangement exposed to laser radiation at the rear.

7. (Previously Presented) The method according to Claim 1,

wherein

a reference temperature is measured in an intermediate space formed by the distance, the measurement being performed by a transmission device through which the laser radiation passes.

8. (Previously Presented) The method according to Claim 1,

wherein

for alignment of the contact metallizations in a coverage position to form the contact pairs, the component composite arrangement opposite the component composite arrangement exposed to laser radiation at the rear is positioned by means of a positioning device which acts biaxially and in parallel to the plane of extent.

9. (Currently Amended) A device for alternately contacting two wafer-like component composite arrangements comprising a receiving frame for supporting and holding a first component composite arrangement on a transparent panel arranged in the receiving frame, having a diode laser composite arrangement arranged inside the receiving frame and separated from the first component composite arrangement by the transparent panel, having a holding clamp for receiving a second component composite arrangement such that contact surfaces of the first and the second component composite arrangements provided with contact metallizations are arranged opposite one another, having a positioning device for relative positioning of the component composite arrangements such that the contact metallizations to be joined together form contact pairs, and having a pressure device for generating a contact pressure between the contact metallizations of the contact pairs, wherein

the diode laser composite arrangement is designed as a diode laser linear arrangement having a plurality of diode lasers arranged in a row which diode lasers are arranged on a diode laser mount that can be moved across the alignment of the row and in parallel to the plane of extent of the component composite arrangement, and wherein

the diode lasers of the diode laser linear arrangement can be activated individually or in groups in such a way that only the diode lasers of the diode laser linear arrangement

which are needed for coverage of the respective transverse extent of the contact surface of the component composite arrangement as a function of the distance to be traversed can be activated for acting upon a circular contact surface of the component composite arrangement with the diode laser linear arrangement that can be moved in parallel to the plane of extent of the component composite arrangement.

10-11. (Canceled).

12. (Previously Presented) The device according to Claim 11,

wherein

the diode laser composite arrangement is designed as a diode laser matrix arrangement having a plurality of diode lasers each arranged in rows and columns.

13. (Previously Presented) The device according to Claim 12,

wherein

the diode lasers of the diode laser matrix arrangement can be activated individually or in groups such that with a coaxial alignment of the surface midpoints of the contact surface of the component composite arrangement and of the matrix surface for acting upon the circular contact surface, the diode lasers can be activated according to the size of the contact surface either in a totality or only to the extent of a partial matrix required for coverage of the contact surface.

14. (Previously Presented) The device according to Claim 9,

wherein

a transmission device which serves to measure a reference temperature is provided in an intermediate space formed by a distance between the transparent panel and the diode laser composite arrangement .

15. (Previously Presented) The device according to Claim 9,

wherein

for alignment of the contact metallizations in a coverage position to form the contact pairs, the component composite arrangement opposite the component composite arrangement that is exposed to laser radiation at the rear is arranged in a positioning device that can be moved in at least two axes.

16. (Previously Presented) The device according to Claim 15,

wherein

the positioning device is designed to be triaxial such that in addition to a biaxial positioning of the component composite arrangement in the plane of extent of the component composite arrangement, the positioning device serves to execute an adjusting movement across the plane of extent such that the positioning device serves to create the contact pressure.

17-23. (Canceled).